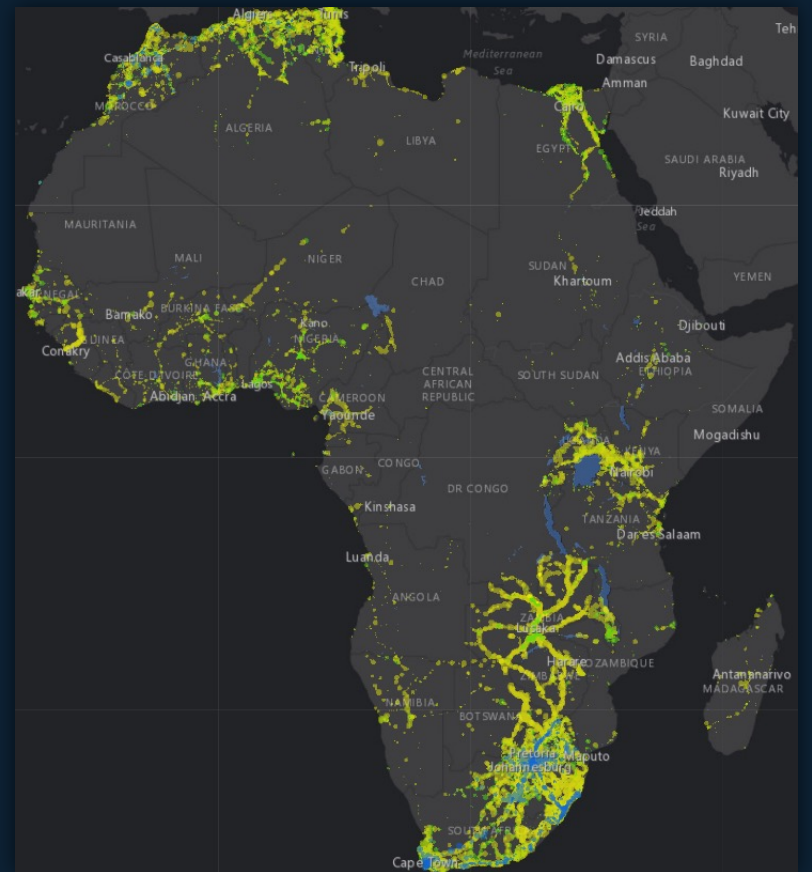


Mission Planning Dashboard *Cell Coverage Analysis Tool*

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Approved for Public Release; Distribution Unlimited, Case 21-2088

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FOR A SAFER WORLD™

Warfighter Need

Mission Planning:

Understand communications limitations for operations & locations



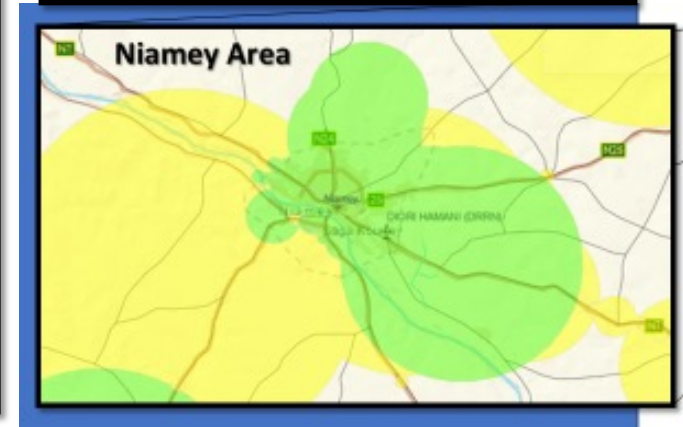
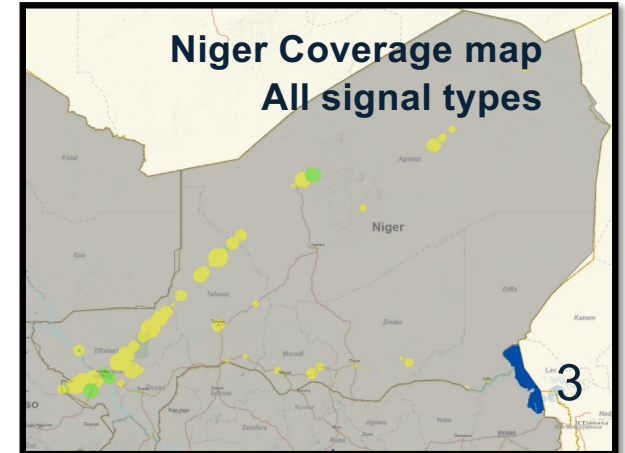
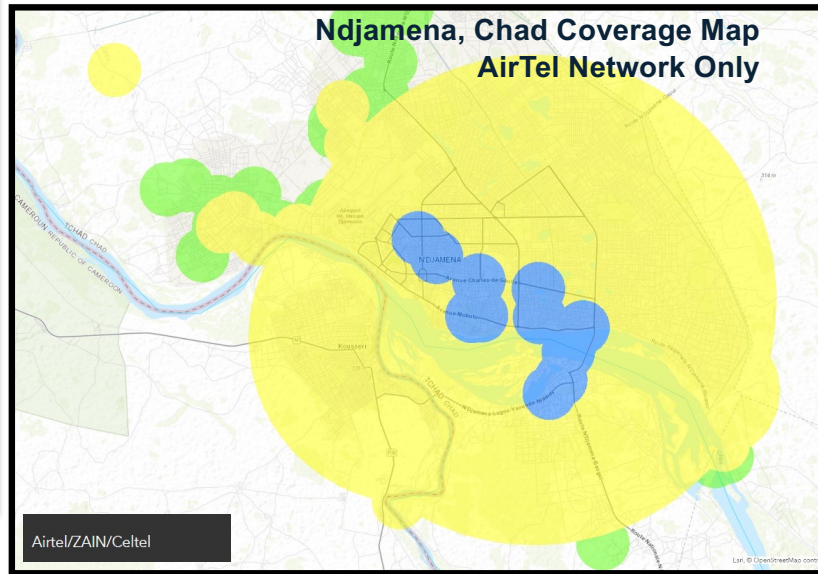
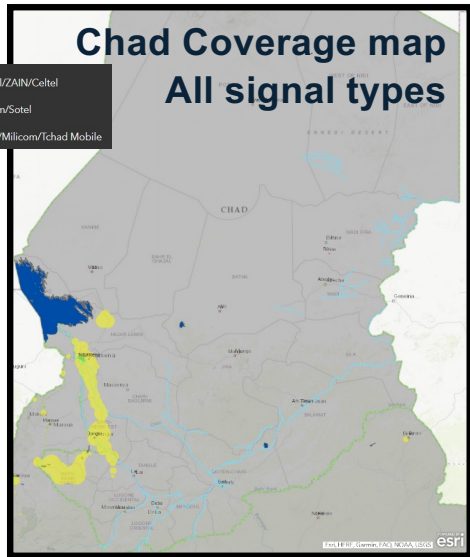
Communications

planning: Provide cellular coverage information needed to develop Contingency and Emergency communications plans



Chad & Niger Coverage Analysis

1. Download and fuse open-source cell tower location data and mobile network provider information
2. Display the tower coverage in GIS map application
3. Analyze visual network availability and coverage types

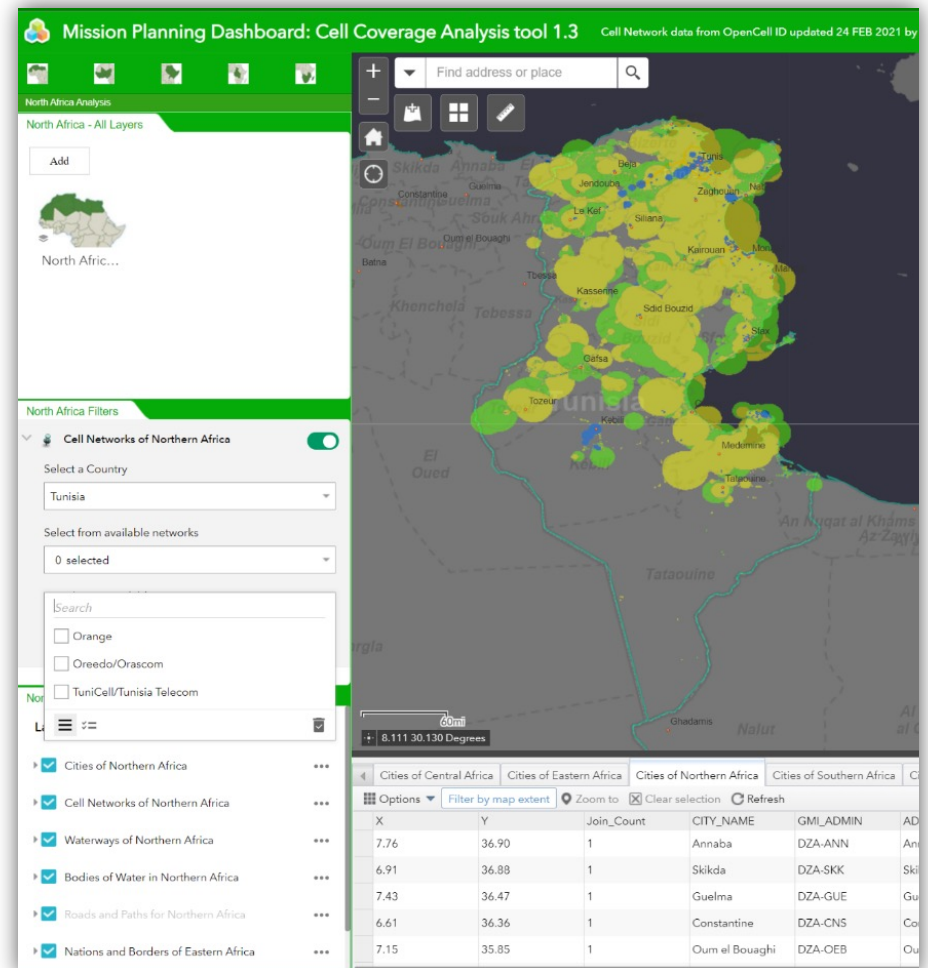


Application Overview

Mission Planning Dashboard Cell Coverage Analysis Tool (CCAT) can support mission and communications planners by providing accurate information on locations where local commercial cellular (mobile) networks are/are not available.

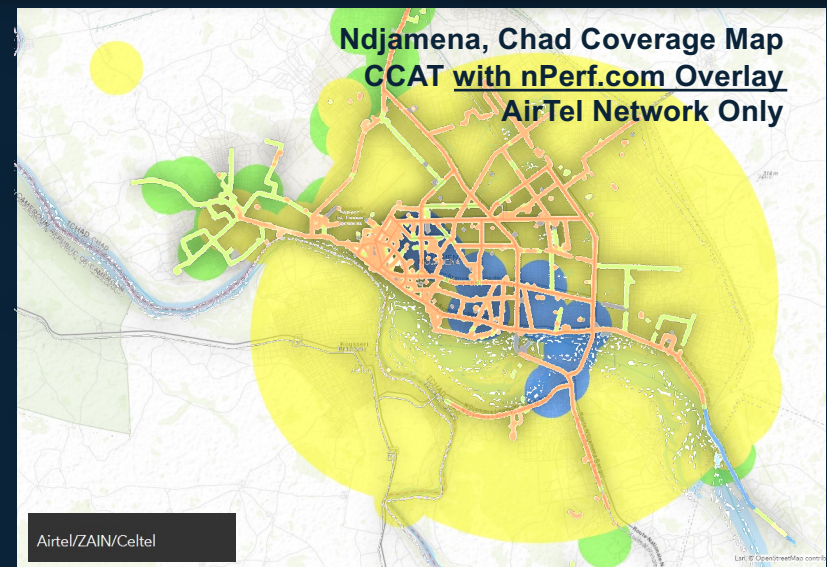
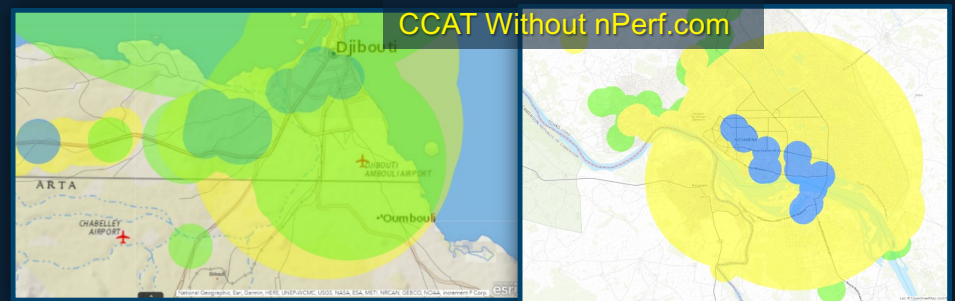
CCAT transforms open-source data on cellular towers & networks into estimations of coverage on the African Continent. Includes querying and filtering for Network brand name (e.g. Vodafone, Orange) and signal types (e.g. 2G, 3G, 4G, 5G).

MITRE has developed a method using Python scripts to process open-source data on cell towers & networks and display this data in an GIS map application.



Extended Use Cases & Next Steps

- Other DOD & IC users and uses
 - In transit Visibility – Logistics
 - NGA – Global Cell Analytics
 - Partner nations – Local data
 - Support NGOs
- Next Steps
 - Prototype ways to display confidence level
 - Increase confidence with new techniques



Questions



Additional Questions?

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Additional Information

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